Launch Mission Execution Forecast

Mission: Atlas V CST-100 OFT-2
Issued: 2 Aug 2021 / 0800L (1200Z)
Valid: 3 Aug 2021 / 1310 – 1330L (1710 – 1730Z)

Forecast Discussion: *No change to the forecast reasoning.* A mid- and upper-level trough over the eastern U.S., southwest steering flow, and ample moisture will encourage scattered to numerous afternoon showers and thunderstorms over the Space Coast this week. Given the pattern, the greatest coverage of convection is expected to hold off until after tomorrow and Wednesday's launch window. However, a weather-related violation is still possible due to activity pushing onshore from the eastern Gulf of Mexico each morning. The primary concerns at this time, particularly toward the end of each count, are the Cumulus Cloud and Lightning Rules. Cloud cover streaming over the state from storms over the eastern Gulf of Mexico will bring an added concern for a Thick Cloud Layer Rule violation.

Launch Day

Probability of Violating Weather Constraints

40%

Primary Concerns: Cumulus Cloud Rule, Lightning Rule, Thick Cloud Layer Rule

Weather Conditions

Weather/Visibility:	Isolated Storms / 7 mi.
Temp/Humidity:	87°F / 72%
Ground Winds (230'):	190° 15 - 19 knots

Clouds

Type	Coverage	Base (ft)	Tops (ft)
Cumulus	Scattered	3,000	10,000
Cirrus	Broken	22,000	28,000

Additional Risk Criteria

Solar Activity: Low

24-Hour Delay

Probability of Violating Weather Constraints

40%

Primary Concerns: Cumulus Cloud Rule, Lightning Rule, Thick Cloud Layer Rule

Weather Conditions

Weather/Visibility:	Isolated Storms / 7 mi.
Temp/Humidity:	85°F / 76%
Ground Winds (230'):	190° 14 - 18 knots

Clouds

Type	Coverage	Base (ft)	Tops (ft)
Cumulus	Scattered	3,000	10,000
Cirrus	Broken	18,000	22,000

Additional Risk Criteria

Solar Activity: Low

***Note**: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear and solar activity.*

Next Forecast Will Be Issued	As Necessary